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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,215	12/20/2001	Stephen L. Muench-Casanova	706126US1	7769
24938	7590	12/22/2004	EXAMINER	
DAIMLERCHRYSLER INTELLECTUAL CAPITAL CORPORATION			FLEMING, FRITZ M	
CIMS 483-02-19			ART UNIT	
800 CHRYSLER DR EAST			PAPER NUMBER	
AUBURN HILLS, MI 48326-2757			2182	

DATE MAILED: 12/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/034,215

Applicant(s)

MUENCH-CASANOVA ET AL.

Examiner

Fritz M Fleming

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.


FRITZ FLEMING
PRIMARY EXAMINER
GROUP 2182

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
It does not identify the citizenship of each inventor.

The citizenship for the first inventor appears to have been inadvertently left blank on the declaration filed 2/27/02.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

First of all, claims 3 and 7 include the terminology “, such as Bluetooth.” Thus claims 3,4,7 are vague and indefinite because it is unclear if the “, such as Bluetooth.” Is exemplary in nature, or required by the claim, as the “such as” places a narrower interpretation after a broader interpretation “standard”. Thus it is unclear if the narrower or broader limitation is meant. Secondly, claims 2 and 7 contain the trademark/trade name BLUETOOTH. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not

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comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe a wireless protocol and, accordingly, the identification/description is indefinite.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Nangle and Intel.

The admitted prior art at [0001-0004] (referring to published application 2003/0120911) sets forth that it is old and well known to program a programmable module via a slow hard wired J1850 communications bus, wherein the programming would require 13 minutes at the slow speed, wherein the assembly line allows 45 seconds at an assembly station. Thus the admitted prior art admits the programming of a programmable module on an assembly line via a slow hard-wired interface, wherein the use of the slow hard-wired bus for programming/reprogramming creates a "bottleneck" on the assembly line due to the time needed to perform the programming/reprogramming. What is lacking is the use of a faster wireless protocol to flash the memory more quickly, given an initial load of the wireless protocol by the wired bus.

Nangle, in the same art of memory programming and reprogramming, has identified the same problem in column 1, that there is a well known problem of the slow downloading of memory programming data via a physical port connection, which is the same as the admitted prior art wired bus interface. Thus it is explicitly stated in lines 44-62 that the

use of the physical port acts to increase the likelihood of a slower manufacturing time. Thus a bottleneck is created in the production process by programming the flash memory (i.e. flashing) via the conventional physical port and physical data link. Thus Nangle teaches a way to overcome this manufacturing bottleneck by using an RF programming protocol, such as BLUETOOTH(RTM) for flash programming per columns 2-5. While columns 3-4 call for the removal of the physical port for the practice of the improvement, but it is clear that column 5, lines 18-35 state that it is conventional to have a wireless device with a physical connection for downloading operating code into a nonvolatile memory. While the desired manner to practice the improvement, it is clear that the physical port can only be eliminated if it is not needed for further use. Clearly, if the physical port is needed in the future, the teachings of Nangle clearly apply to the programming that causes the bottleneck. If the bottleneck is caused by the post initial programming, then Nangle clearly teaches to provide the post-initial programming via the wireless and faster BLUETOOTH (RTM) wireless protocol. Nangle only teaches the removal of the physical port if it is not needed, per the design criteria of column 5, lines 18-35. Clearly if the existing design requires the use of the physical port, then it is to be left intact, wherein the subsequent programming is done in a wireless manner. This is clearly summed up in column 5, lines 14-16, in which the improvement is called to be a "retrofit" of an existing device. Hence a "retrofit" means that an existing device has an existing wired physical port and the "retrofit" is to provide the ability to be flashed by a wireless and faster protocol. It is to be noted that column 4, lines 13+ set forth a phased programming approach. Here it is clearly set forth that a two level programming is

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desired, with a first software version is preprogrammed and the second version is added via the RF download. Column 4 continues to state that the first level of programming is provided before shipping to an OEM wherein the first level has a boot-up algorithm to allow the device to turn on and receive the first or second software versions. Further, a second level may be provided for a wireless device application into BIOS for the wireless functions. Thus the post initial programming, at a minimum, is done via the wireless link. Column 5, lines 49+ also make for the possibility of the first programming to prepare the wireless device to receive memory array configuration second programming. This means that the first programming prepares the wireless device to receive the secondary programming via the BLUETOOTH (RTM). Clearly, a preparation means that the device has to be programmed in the conventional manner, as a preparation for the wireless device means that it is prior to the stage in which the RF can be received by the device. Thus, the teachings apply to preparing a device to receive RF programming via a physical programming, as this would fall under the explicitly taught "retrofit" as a "retrofit" in this aspect would mean that an existing device with a convention physical port would be "retrofitted" with a wireless capability and prepared via the physical port so as to enable subsequent secondary programming via the RF protocol. Summed up in column 6, lines 3-17, one finds again a "retrofit" in which an existing device is to be programmed for a new feature. The new programming is downloaded via the RF interface.

The INTEL article shows the various components of the BLUETOOTH (RTM) architecture, to include the protocol and its stacks and layers. Kernel modes are

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needed per page 5, wherein the stacks are shown in Figure 3 and the use of BLUETOOTH (RTM) as an open protocol are shown at page 8.

Thus it would have been obvious to one having ordinary skill in the art at the time that the invention was made to modify the admitted prior art by the teachings of Nangle and INTEL for the express purpose of avoiding a manufacturing bottleneck by downloading secondary programming via an open RF protocol, such as BLUETOOTH (RTM), as this is a faster protocol than the conventional physical port method. INTEL shows the types of information to be included with the preparation programming of Nangle to include stacks and kernels in order to prepare an existing device for RF flashing. As pointed out above, Nangle prefers the elimination of the physical port, but in a "retrofit", the existing port would not be removed, but the wireless added to avoid the bottleneck in the manufacturing process. Consistent with the combined teachings, one of ordinary skill in the art would retrofit an existing programmable device with an existing physical port with an RF flashing capability by providing an initial preparatory programming via the wired (existing) physical port to enable additional secondary programming via an RF (faster protocol like BLUETOOTH) interface. This is consistent with Nangle's retrofit concept, to provide an initial capability by the manufacturer with additional programming to be added via the RF by the OEM. Thus the second programming represents additional programming such as applications and program software to be installed by the OEM, thus requiring that the initial preparatory programming be smaller than what is added by the OEM, as the initial programming is just designed to get the device to download additional programming and functionality in a wireless manner. Per Nangle,

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the wireless protocol is faster at about 700KBps. Nangle explicitly teaches that the wireless is faster than the wired. AS Nangle and the admitted prior art set forth a manufacturing environment, assembly lines being explicitly mentioned in the admitted prior art, it is obvious subject matter that in a retrofit situation (such as that of the admitted prior art J1850 port that is subsequently needed in the vehicle by the programmable module), that the retrofit will leave the physical port in place and provide the preparatory programming via this port in order to allow faster flashing at a subsequent OEM station. Thus the initial programming is done in the conventional manner via the conventional physical (i.e. wired) port, as there is no bottleneck in the assembly line process at this point. Subsequent bottlenecks of the admitted prior art are avoided by "retrofitting" via Nangle (and the details of the BLUETOOTH components needed per INTEL) and subsequent secondary and faster downloading via the RF interface. Thus the initial programming is done via a flashing at a first station via the existing physical port and the secondary programming is done via the "retrofitted" RF interface in order to avoid the manufacturing bottleneck of slowed manufacturing times, as expressly taught by Nangle to be the solution to the problem. A "retrofit" does not entail a removal of parts, but the addition of new parts or capabilities not previously available at the time of original manufacture (per conventional dictionary meanings). Thus the existing admitted prior art devices that have and require the use of the J1850 physical port are to be modified in a "retrofit manner" per Nangle (and the protocol details of INTEL) to allow for the subsequent programming (i.e. flashing) via the faster open FR protocol to avoid the manufacturing process bottlenecks caused by the

flashing of large amounts of memory via a slow physical interface, as expressly taught to be the solution by Nangle to the same problem faced by applicants.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Walukas shows phone programming. Rhoads et al. show boot loader programming. Raichle et al. show a wireless and wired interface of the J1850 variety. Hutchinson, IV et al. show program downloading. Wirtz, II et al. show flashing. Hayes, Jr. et al. show wireless programming. AUDI AG show a mobile programming apparatus 4. 2003/0120911 is the instant published application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fritz M Fleming whose telephone number is 571-272-4145. The examiner can normally be reached on M-F, 0600-1500.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Fritz M Fleming
Primary Examiner
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